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| 09/355,732 | 08/04/1999 | KAZUHIKO MARUYAMA | 1137-782A | 6854 |

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EXAMINER

NGUYEN, LEE

| ART UNIT | PAPER NUMBER |
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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Paper No. 18

Application Number: 09/355,732
Filing Date: August 04, 1999
Appellant(s): MARUYAMA, KAZUHIKO

Vincent M. DeLuca
For Appellant

EXAMINER'S ANSWER

Mailed
APR 11 2003
Technology Center 2600

This is in response to the appeal brief filed 9/5/2002.

(1) *Real Party in Interest*

A statement identifying the real party in interest is contained in the brief.

(2) *Related Appeals and Interferences*

A statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

(3) *Status of Claims*

The statement of the status of the claims contained in the brief is correct.

(4) *Status of Amendments After Final*

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) *Summary of Invention*

The summary of invention contained in the brief is correct.

(6) *Issues*

The appellant's statement of the issues in the brief is correct.

(7) Grouping of Claims

Appellant's brief includes a statement that claims 13 and 31-33 do not stand or fall together and provides reasons as set forth in 37 CFR 1.192(c)(7) and (c)(8).

(8) Claims Appealed

The copy of the appealed claims contained in the Appendix to the brief is correct.

(9) Prior Art of Record

| | | |
|-----------|-----------------|---------|
| 5,457,680 | KAMM ET AL | 10-1995 |
| 5,625,877 | DUNN ET AL | 4-1997 |
| 5,781,583 | BRUCKERT ET AL | 7-1998 |
| 5,799,252 | NAKAGOSHI ET AL | 8-1998 |

(10) Grounds of Rejection

After reconsidering the argument concerning the rejection of independent claims 18 and 31, the examiner is convinced that the rejection of independent claims 18 and 31 is improper, and therefore, independent claims 18, 31 and dependent claims 19, 21, 24-25 and 32-35 are withdrawn

and are allowable over the prior art of record. Only independent claims 13-15 stand rejected in this examiner's answer.

Claim 13 is rejected under 35 U.S.C. 102(b) as being anticipated by Kamm et al. (US 5,457,680).

Regarding claim 13, Kamm teaches a radio channel assignment method for assigning radio channels for carrying out radio communication between a base station B (fig. 1) and a plurality of radio terminals SU (only one shown) in a radio zone of said base station (see cell B), comprising the step of said base station B determining a number of radio channels to be assigned to a first radio terminal SU according to the rate of increase of stored data to be transmitted per unit time (fig. 1K, steps 616-618, col. 9, line 62 through col. 10, line 3).

Claim 14 is rejected under 35 U.S.C. 102(b) as being anticipated by Dunn et al. (US 5,625,877).

Regarding claim 14, Dunn teaches a radio assignment method for assigning radio channels for carrying out radio communication between a base station 102-103 (fig. 1) and a plurality of radio terminals 101 (only one

shown) in a radio zone of said base station 102, comprising the step of said radio terminals determining a number of radio channels to be assigned to itself according to the rate of increase of stored data to be transmitted by that radio terminal per unit time (col. 12, line 66 through col. 13, line 22).

Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bruckert et al. (US 5,781,583) in view of Nakagoshi et al. (US 5,799,252).

Regarding claim 15, Bruckert teaches a radio channel assignment method for assigning radio channels for carrying out radio communication between a first base station A (fig. 6) and a plurality of radio terminals 12 in a radio zone of said first base station A and a handover to a second base station B having a second radio zone. Bruckert also teaches that during the handover of the first radio terminal from the first base station A to the second base station B, the same radio channels are assigned to both base stations A and B (col. 10, lines 15-22). Bruckert fails to teach exchanging information regarding channel assignment between the base stations in a handover. However, the technique of exchanging information regarding channel assignment in a handover is conventionally well known. Nakagoshi

teaches that during a handover, information regarding the radio channels used between the base stations can be exchanged (col. 4, lines 6-14).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Nakagoshi to the system of Bruckert in order to enhance the handover process.

(11) *Response to Argument*

The argument concerning the rejection of claims 18, 19, 21, 24-25 and 31-35 is moot in view of the allowance indicated above.

Regarding the rejection of independent claim 13, appellant contends that steps 622-626 of Fig. 1K are simply the reverse channel analog of the forward channel steps 614-618. Specifically, Kamm allocates an additional channel when either the forward or reverse channel data packet size is greater than a threshold value. Kamm does not determine any rate of increase of stored data per unit time as require by claim 13.

In response, packet is a group of stored data to be transmitted or received per unit time. Therefore, as shown in column 9, line 62 through column 10, line 3 in Kamm, as the packet size (the stored data) increases

over a number of time slots, an additional slot is allocated. Consequently, it is fair to say that the stored data of Kamm is not constant, but it can be increased or decreased overtime. As a result, there is a rate of increasing or decreasing of stored data in Kamm.

Regarding the rejection of independent claim 14, appellant argues that Dunn does not determine whether to allocate an additional radio according to a rate of increase of stored data per unit time.

In response, the size of the message stored in Dunn is not fixed, but it varies up and down. If the size of the stored message is up, then it needs to aggregate additional channels. Therefore, Dunn does anticipate the claimed rate of increasing of stored data per unit.


Regarding the rejection of independent claim 15, appellant cites col. 6, line 64 through col. 7, line 3 of Nakagoshi to show that there is no communication between the base stations of the number of radio channels that were assigned to the radio terminal as cited by the examiner in col. 4, lines 10-14 in the rejection.

In response, in Nakagoshi, there are three methods for performing a handover of a mobile station 306 between a serving base station 302B and a destination base station 302A (col. 6, line 53 through col. 7, line 3). All of

the above three methods require information exchange between the base stations 302B and 302A (col. 6, lines 43-46) so that the same set of channels can be used by the mobile station 306 (col. 6, line 64 through col. 7, line 3 and col. 4, lines 10-14). Furthermore, Nakagoshi also teaches exchanging channel information for the handover in col. 11, lines 4-15. Therefore, Nakagoshi does teach the claimed limitation.


For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

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Primary Examiner
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April 2, 2003

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